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(54) 【発明の名称】 化粧料

(57) 【要約】

【目的】 皮膚への感触性、太陽光線吸収・乱反射性、耐熱性、耐溶剤性および分散性に優れ、塗布した際の美観性に優れた化粧料を提供する。

【構成】 球径が0.01~30 $\mu$ である中実ガラス球又は中空ガラス球を配合してなる化粧料。

## 【特許請求の範囲】

【請求項1】 球径が0.01～30 $\mu$ であるガラス球を配合することを特徴とする化粧料。

【請求項2】 ガラス球が中実のガラス球である請求項1記載の化粧料。

【請求項3】 ガラス球が中空のガラス球である請求項1記載の化粧料。

【請求項4】 ガラス球が太陽光線を吸収又は乱反射する化合物と併用されてなる請求項1記載の化粧料。

【請求項5】 ガラス球が表面被覆されている請求項1記載の化粧料。

## 【発明の詳細な説明】

【0001】

【産業上の利用分野】本発明は球状物質配合化粧料に関する。

【0002】

【従来の技術および発明が解決しようとする課題】化粧料には、皮膚への感触性、太陽光線吸収・乱反射性および美観性を高めるために、種々の球状物質を配合することがある。しかしながら、従来化粧料に配合されて来たナイロン球、アクリル球、PMMA球等の有機合成樹脂製球状物質、あるいは球状セルローズは耐熱性及び耐溶剤性が低く、化粧料の製造時変形を起こしたり溶剤により膨潤を起こすことにより、十分な機械的強度が得られない場合があり、十分な皮膚への感触および所期の美観性が得られない欠点がある。また、これらの合成樹脂製球状物質あるいは球状セルローズが変形あるいは膨潤する欠点を減じる目的、あるいは太陽光線吸収・乱反射の目的で、酸化チタン、シリカ等が配合されることがあるが、これらの物質は皮膚への感触性が劣るほか、これらの物質そのものの触媒活性により、他の化粧料配合成分に悪影響を与える場合がある。

【0003】さらに、化粧料には、太陽光線の吸収・乱反射の目的で微細ガラス箔片を混合する場合があるが、本物質を配合した化粧料は皮膚に均一に塗布することが困難であり、所期の効果が得られないばかりでなく、本物質の箔片状の構造から破壊されやすく、十分な機械的強度が得られない。また本物質の箔片状構造上、化粧料を塗布された皮膚の剥離などの損傷が懸念される。

【0004】

【課題を解決するための手段】本発明者らは、化粧料の感触性、美観性および太陽光線吸収・乱反射性促進成分の一つの要因として、機械的に安定であり、耐溶剤性に優れた球状物質の配合に着目し、鋭意研究した結果、ガラス球を配合することにより、均一に塗布でき、感触性、太陽光線吸収・乱反射性、耐熱性、耐溶剤性、分散性および美観性に優れた化粧料が得られることを知見し本発明に到達した。即ち、本発明は球径が0.01～3

【フェイス・パウダー】

① ステアリン酸亜鉛

0.0 $\mu$ であるガラス球を配合することを特徴とする化粧料である。

【0005】本発明で用いるガラス球は中実もしくは中空で外側がほぼ真球状のものであり、その球径は0.01～30 $\mu$ であることを要する。これらガラス球はそれ自体で用いてもよく、また太陽光線を吸収又は乱反射する化合物と混合して使用してもよく、また表面被覆剤で表面処理して使用してもよい。

【0006】本発明で用いるガラス球はそれ自身皮膚への感触に優れ、また紫外線の吸収性に優れ、また太陽光線を乱反射させ美観を高める特性ももっており、さらに機械的強度にも優れている。それ故配合すべき化粧料等に応じこれらの機能を顕著に高めることができる。ガラス球の球径は前記したとおり、0.01～30 $\mu$ であることを要するが、より好ましい球径はその使用目的によって幾分異なる。たとえばガラスを紫外線防御剤として配合するには、ガラス球の球径は、特に0.01～0.3 $\mu$ になるようにすることが好ましい。また、ガラス球が太陽光線を乱反射させる特性を利用して、美観性を特に向上させるためには、0.5 $\mu$ ～20.0 $\mu$ とすることが好ましい。これらにおいて、ガラス球に太陽光線を吸収または乱反射する化合物として、例えば微粒子酸化チタン、微粒子酸化亜鉛、酸化鉄あるいは酸化セリウム等を混合することにより、太陽光線の吸収又は乱反射効果をさらに高めることができる。

【0007】ガラス球の機械的強度を利用して艶剃用化粧料などにガラス球を配合することも好ましく、この場合のガラス球の球径は5.0 $\mu$ ～30.0 $\mu$ とすることが好ましい。本発明のガラス球を化粧料に配合する場合の配合量は、特に制限を受けるものではなく、一般的には1%～70%の範囲で使用され、皮膚への感触性、美観性、紫外線防御性など、求められる特性によって最適量が適宜に決定される。ガラスを構成する成分の万一の化粧料中への溶出を防御し、かつ化粧料成分との親和性を増強する目的でガラス球を表面処理して用いることも好ましい。この場合の表面処理剤としては耐熱性及び耐溶剤性に優れたシリコン化合物、脂肪酸、脂肪酸アルミニウム等の金属石鹸、有機フッ素化合物などが望ましいが、ガラス球の特性を保持し、またガラス球の表面処理に適する物質であれば、どのような処理剤も用いる。

【0008】以下に、本発明を実施例及び比較例によって、更に詳細に説明するが、本発明は以下の実施例に限定されるものではない。(尚以下において「ガラス球」は中実ガラス球を意味する。)

【0009】(実施例-1)平均粒径30 $\mu$ のガラス球を用い、次に示す処方にてフェイス・パウダーを製造した。

1.0

3

4

② 炭酸カルシウム	5.0
③ マイカ	10.0
④ 酸化チタン	3.0
⑤ ガラス球	60.0
⑥ ベンガラ	0.1
⑦ 黄酸化鉄	0.1
⑧ 黒酸化鉄	0.01
⑨ タルク	適量
▲10▼ ワセリン	1.0
▲11▼ 流動パラフィン	1.0
計	100.0

①～⑨をハンマー・ミキサーにて粉碎後、ヘンシェル・ミキサーにて混合し、これに溶解した▲10▼～▲11▼を加え、ヘンシェル・ミキサーにて十分に混合する。これをハンマー・ミキサーにて粉碎した後、容器に充填してフェイス・パウダーを得た。上記の製造工程にて作成したフェイス・パウダーを走査型電子顕微鏡にて観察した結果、ガラス球は製造前の状態と全く同様であり、変形は認められなかった。又、本フェイス・パウダーの使用感は軽いタッチ感で肌への感触に優れたムラ付の無\*20

[パウダー・ファンデーション]

① 中空ガラス球	20.0
② マイカ	10.0
③ セリサイト	40.0
④ 酸化チタン	5.0
⑤ ステアリン酸亜鉛	5.0
⑥ ベンガラ	0.5
⑦ 黄酸化鉄	1.0
⑧ 黒酸化鉄	0.2
⑨ タルク	適量
▲10▼ 流動パラフィン	6.5
▲11▼ ワセリン	3.0
▲12▼ ポリオキシエチレンステアeryl	0.5
計	100.0

①～⑨をハンマー・ミキサーにて粉碎後、ヘンシェル・ミキサーにて混合し、これに溶解した▲10▼～▲12▼を加え、十分にヘンシェル・ミキサーにて混合する。これをハンマー・ミキサーにて粉碎した後、中皿に成型し、パウダー・ファンデーションを得た。上記の製造工程にて作成したパウダー・ファンデーションを透過型電子顕微鏡にて粉体の状態を観察した結果、球状の中空ガラス球は製造前の状態と全く同様であり、変形は認められなかった。又、本パウダー・ファンデーションの使用感は肌への感触に優れた、ムラ付の無い仕上がりであつた。

[ベース・クリーム]

① モノステアリン酸ポリエチレングリコール (40 E. O.)	2.0
② モノミリスチン酸グリセリン	5.0
③ ミリスチン酸	5.0
④ ベヘニルアルコール	0.5
⑤ オクタン酸セチル	5.0

\*い仕上がりとなった。

【0010】(比較例-1) 上記実施例-1の処方中⑤ガラス球をナイロン・パウダーに置き換え、同一の製造工程にてフェイス・パウダーの製造を試みたところ、ナイロン・パウダーはハンマー・ミキサーにて変形を起こし、所期のフェイス・パウダーは得られなかった。

【0011】(実施例-2) 平均粒径10μの中空ガラス球を用い、次に示す処方にてパウダー・ファンデーションを製造した。

た。

【0012】(比較例-2) 上記実施例-2の処方中①の中空ガラス球を中空PMMA球に置き換え、パウダー・ファンデーションの製造を試みたところ、中空PMMA球はヘンシェル・ミキサーにて熱変形を起こし、所期のパウダー・ファンデーションは得られなかった。

【0013】(実施例-3) 酸化チタンを混合した平均粒径0.3μのガラス球を用い、次に示す処方にてベース・クリームを製造した。

5	6
⑥ 流動パラフィン	10.0
⑦ 酸化チタン混合ガラス球	15.0
⑧ 1,3-ブチレングリコール	5.0
⑨ 精製水	残部
▲10▼ 香料	適量
計	100.0

①～⑥及び▲10▼を加熱溶解後、⑦～⑨を加え乳化し、30℃まで冷却した。上記製造工程にて作成したベース・クリームを皮膚に塗布しSPF (Sun Protection Factor) を測定した結果15を得た。本処方に用いた酸化チタン混合ガラス球は、処方中での分散が極めて良好なため、通常用いられている酸化チタン配合系に比較して皮膚への均一な塗布性に優れ、ムラの無い塗布が可能となり、良好なSPFの結果を得た。

\*【0014】(比較例-3) 上記実施例-2の処方中⑦を酸化チタンに置き換え、同一製造工程にてベース・クリームの作成を試みたところ、処方中にて酸化チタンが凝集を起こすため分散が不良であり、所期のSPFが得られなかった。

【0015】(実施例-4) シリコーン・オイル表面処理した平均粒径10μmのガラス球を用いて次に示す処方にてファンデーションを製造した。

[ファンデーション]

① スクワラン	15.0
② ミリスチン酸オクチルドデシル	3.0
③ テトライソステアリン酸ドデシル	1.0
④ ミリスチルアルコール	1.0
⑤ パルミチン酸	1.0
⑥ モノステアリン酸グリセリン	1.0
⑦ モノオレイン酸ソルビタン	2.0
⑧ トリステアリン酸POEグリセリン(20E. O.)	1.0
⑨ モノステアリン酸POEソルビタン(15E. O.)	2.0
▲10▼ ベンガラ	0.2
▲11▼ 黄酸化鉄	0.25
▲12▼ 黒酸化鉄	0.25
▲13▼ マイカ	0.5
▲14▼ 酸化チタン	1.0
▲15▼ シリコーン・オイル処理ガラス球	3.0
▲16▼ ベントナイト	0.9
▲17▼ トリエタノールアミン	0.8
▲18▼ ポリオキシエチレンメチルグリコシド(10E. O.)	2.0
▲19▼ 精製水	残部
▲20▼ 香料	適量
計	100.0

①～⑨を加熱溶解して▲10▼～▲15▼を添加し、ホモジナイザーで均一分散後、さらに▲20▼を添加した。予め▲16▼～▲19▼を均一加熱溶解し、これを上記の混合物に加えて乳化後、30℃まで冷却した。上記製造工程にて作成したファンデーションは、均一な塗布、軽いタッチの感触、塗布した際のクスマの無い美しい仕上がりとなった。

【0016】(比較例-4) 上記実施例-4の処方中▲15▼をシリコーン・オイル処理PMMA球に置き換え、同一工程にてファンデーションの作成を試みたところ、PMMA球のシリコーン処理工程で熱による変形及び融着が起り、処方は分散性が不良であり、所期の感触及び仕上がりを得られなかった。

【0017】(実施例-5) 上記実施例-2の処方中①をフッ素にて表面処理した平均粒径10μmの中空ガラス球に置き換え、同一工程にてパウダー・ファンデーションを作製した。本工程で得られたパウダー・ファンデーションのガラス球は実施例-2と同様に安定であり、製品の感触も実施例-2と同様に良好であり、ガラス球の乱反射性が高まる結果、実施例-2に比較し塗布した際の美観性がより優れた製品が得られた。

(比較例-5) 上記実施例-2の処方中①を長径10μmの微細ガラス箔片に置き換え、同一工程にてパウダー・ファンデーションを作製した。本工程で得られたパウダー・ファンデーション中の微細ガラス箔片は、工程中破片を受けた製造前と比較し微細化されていた。又、皮膚

に均一に塗布されず、実施例-5に比較し塗布した際の美観性が劣った。

(実施例-6～8及び比較例6～8)下記表1に示す配合によりプレシェイブ化粧料をそれぞれ得、実施例-6\*

\*～8及び比較例-6～8とした。

【0018】

【表1】

表1

		実施例			比較例		
		6	7	8	6	7	8
粉 体	ガラス球(平均粒径 $8\mu$ )	4.0					
	中空ガラス球(平均粒径 $5\mu$ )		4.0				
	ステアリン酸処理ガラス球 (平均粒径 $10\mu$ )			4.0			
	ナイロン・パウダー (平均粒径 $7\mu$ )				4.0		
	アクリル・パウダー (平均粒径 $10\mu$ )					4.0	
	PMMA球(平均粒径 $8\mu$ )						4.0
	グリチルリチン酸	0.1	0.1	0.1	0.1	0.1	0.1
液 体	エタノール (99v/v%)	75.0	75.0	75.0	75.0	75.0	75.0
	香料	0.5	0.5	0.5	0.5	0.5	0.5
	精製水	20.4	20.4	20.4	20.4	20.4	20.4

【0019】実施例6～8：髭の剃り易さ、髭剃り後の感触は良好であった。配合した粉体の熔融及び固化は認められなかった。

比較例6：配合された粉体の固化が認められたが、髭の剃り易さ、髭剃り後の感触は良好であった。

比較例7～8：配合された粉体の熔融及び固化が起こり、髭の剃り易さ・髭剃り後の感触は不良であった。

【0020】(比較例-9)上記実施例-1の処方中⑤

を平均粒径 $35\mu$ のガラス球に置き換え、同一工程にてフェイス・パウダーを製造した。本製品を皮膚に塗布して評価した結果、軽い滑りのある良好な感触が得られたが、ガラス球の粒径が増したことにより、皮膚への密着力に欠け、化粧崩れが起こり易くなり、化粧もちの点で欠点となった。実施例-1及び比較例-9の結果より、ガラス球の平均粒径は $30\mu$ 以下が良好との結論を得た。

# PATENT ABSTRACTS OF JAPAN

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(71)Applicant : J O KOSUMETEITSUKUSU KK

(22)Date of filing : 14.05.1993

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IMAI MASAHARU

FUJIMOTO SUSUMU

## (54) COSMETIC

### (57)Abstract:

PURPOSE: To obtain a cosmetic capable of uniformly applying, excellent in the touch, absorption of solar light, diffused reflection, reflection resistance, heat resistance, solvent resistance, dispersibility and aesthetic sense by blending collapsed or hollow glass globes.

CONSTITUTION: This cosmetic is obtained by blending glass globes having 0.01-30 $\mu$ m globular diameter therein. The glass globes used are collapsed or hollow ones and has nearly true globular shape at the outside. The glass globes may combinedly be used with a compound capable of absorbing solar light or causing diffused reflection (e.g. fine-particulate titanium oxide). Further, as the glass globes, those surface-treated with silicone resin, metal soap, organic fluorine compound, etc., are preferably used. The preferred particle diameter thereof is 0.5-20.0 $\mu$ m in order to improve aesthetic sense by utilizing characteristic property of the glass globes capable of causing diffused reflection of solar light.

## LEGAL STATUS

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CLAIMS

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[Claim(s)]

[Claim 1] The charge of makeup characterized by blending the bulb whose spherical diameters are 0.01-30micro.

[Claim 2] The charge according to claim 1 of makeup whose bulb is a solid bulb.

[Claim 3] The charge according to claim 1 of makeup whose bulb is a bulb in the air.

[Claim 4] The charge according to claim 1 of makeup which it comes to use together with the compound with which a bulb absorbs or reflects a solar beam of light irregularly.

[Claim 5] The charge according to claim 1 of makeup to which the surface coating of the bulb is carried out.

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[Translation done.]

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DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[Field of the Invention] this invention relates to the charge of spherical matter combination makeup.

[0002]

[Description of the Prior Art] In order to raise the touch nature, solar beam-of-light absorption / irregular reflection nature, and fine sight nature to the skin, various spherical matter may be blended with the charge of makeup. However, the spherical matter made from organic synthetic resin, such as a nylon sphere conventionally blended with the charge of makeup, an acrylic sphere, and PMMA sphere, or a spherical cellulose has thermal resistance and low solvent resistance, and has the fault from which sufficient mechanical strength may not be obtained and the touch and the expected fine sight nature to the satisfactory skin are not obtained by causing deformation at the time of a manufacture of the charge of makeup, or starting a swelling by the solvent. Moreover, although titanium oxide, a silica, etc. may be blended for the purpose which reduces the fault which these spherical matter made from synthetic resin or spherical celluloses transform or swell, or the purpose of solar beam-of-light absorption and a scattered reflection, these matter is inferior in the touch nature to the skin, and also it may have a bad influence on other charge combination components of makeup with the catalytic activity of these matter [ itself ].

[0003] Furthermore, although the piece of a detailed glass foil may be mixed for the purpose of absorption and the scattered reflection of a solar beam of light, the charge of makeup which blended this matter is difficult to apply to the skin uniformly, an expected effect is not not only acquired, but the charge of makeup is easy to destroy from the structure of the shape of a piece of a foil of this matter, and sufficient mechanical strength is not obtained. Moreover, we are anxious about trauma of sublation of the skin to which the charge of makeup was applied etc. on the foil scale structure of this matter.

[0004]

[Means for Solving the Problem] As a result of inquiring zealously paying attention to the combination of the spherical matter which whose this invention persons are mechanically stable as one factor of the touch nature of the charge of makeup, fine sight nature, and solar beam-of-light absorption / irregular reflection nature promotion component, and was excellent in solvent resistance, by blending a bulb It could apply uniformly, the knowledge of the charge excellent in touch nature, large positive-glow line absorption / irregular reflection nature, thermal resistance, solvent resistance, dispersibility, and fine sight nature of makeup being obtained was carried out, and this invention was reached. That is, this invention is a charge of makeup characterized by blending the bulb whose spherical diameters are 0.01-30.0micro.

[0005] The outside of the bulb used by this invention is a true sphere-like thing mostly in solid or hollow, and it requires that the spherical diameter is 0.01-30micro. These bulbs may be mixed with the compound which may use by itself, and absorbs or reflects a solar beam of light irregularly, may use it, and by the surface-coating agent, surface treatment of them may be carried out and they may be used.

[0006] The bulb used by this invention is excellent in the touch to the skin in itself, and is excellent in the absorptivity of ultraviolet rays, and also has the property which is made to reflect a solar beam of light irregularly, and raises a fine sight, and is further excellent also in the mechanical strength. So, according to the charge of makeup which should be blended, these functions can be raised notably. Although it requires that the spherical diameters of a bulb are 0.01-30micro as described above, a more desirable spherical diameter changes a little with the purposes of use. For example, in order to blend glass as an ultraviolet-rays defense agent, as for especially the spherical diameter of a bulb, it is desirable that it is made to be set to 0.01-0.3micro. Moreover, in order for a bulb to raise especially fine sight nature using the property on which a solar beam of light is made to reflect irregularly, it is desirable to be referred to as 0.5micro-20.0micro. Absorption or the irregular reflection effect of a solar beam of light can be further raised by setting to these, and considering as the compound which absorbs or reflects a solar beam of light irregularly on a bulb, for example, mixing particle titanium oxide, a particle zinc oxide, an iron oxide, or a cerium oxide.

[0007] It is also desirable to blend a bulb with the charge for \*\*\*\* of makeup etc. using the mechanical strength of a bulb, and, as for the spherical diameter of the bulb in this case, it is desirable to be referred to as 5.0micro-30.0micro. Especially the loadings in the case of blending the bulb of this invention with the charge of makeup do not receive a limit, and, generally are used in 1% - 70% of the domain, and an optimum amount is suitably determined by the properties searched for, such as the touch nature to the skin, fine sight nature, and ultraviolet-rays defense nature. It is also desirable to carry out surface treatment of the bulb and to use it in order to defend elution into the emergency charge of makeup of the component which constitutes glass and to reinforce the compatibility with the charge component of makeup. Although metallic soaps, such as a silicone compound which was excellent in thermal resistance and solvent resistance as a surface treatment agent in this case, a fatty acid, and fatty-acid aluminum, an organic



fluorine compound, etc. are desirable, if it is the matter which holds the property of a bulb and fits the surface treatment of a bulb, any processing agents can be used.

[0008] Although an example and the example of a comparison explain this invention still in detail below, this invention is not limited to the following examples. (In addition, a "bulb" means a solid bulb below.)

[0009] (Example -1) Face powder was manufactured by prescription shown below using the bulb of 30micro of mean particle diameters.

[Face powder]

\*\* A zinc stearate 1.0 \*\* calcium carbonate 5.0 \*\* A mica 10.0 \*\* Titanium oxide 3.0 \*\* A bulb 60.0 \* Red ochre 0.1 \*\* yellow iron oxide 0.1 \*\* black iron oxide 0.01 \*\* talc Optimum-dose \*\*10 Vaseline 1.0 \*\*11 Liquid paraffin 1.0 Total \*\*10 which mixed 100.0\*\* - \*\* in the Henschel mixer after trituration by the hammer mixer, and was melted in this -\*\*11 It fully mixes in \*\*\*\*\* and a Henschel mixer. After the hammer mixer ground this, the container was filled up and face powder was obtained. As a result of observing the face powder created in the above-mentioned manufacturing process in a scanning electron microscope, the bulb is completely the same as that of the status before a manufacture, and deformation did not accept. Moreover, the feeling of use of this face powder became the result which is not with the nonuniformity which was excellent in the touch to the skin with the light feeling of a touch.

[0010] (Example -1 of a comparison) When \*\* bulb was transposed to nylon powder during prescription of the above-mentioned example -1 and the manufacture of face powder was tried in the same manufacturing process, nylon powder causes deformation by the hammer mixer, and expected face powder was not obtained.

[0011] (Example -2) Powder foundation was manufactured by prescription shown below using the hollow bulb of 10micro of mean particle diameters.

[Powder foundation]

\*\* A hollow bulb 20.0 \*\* A mica 10.0 \*\* A sericite 40.0 \*\* Titanium oxide 5.0 \*\* A zinc stearate 5.0 \*\* red ochre 0.5 \*\* yellow iron oxide 1.0 \*\* black iron oxide 0.2 \*\* talc optimum-dose \*\*10 Liquid paraffin 6.5 \*\*11 Vaseline 3.0 \*\*12 Polyoxyethylene stearyl 0.5 Total \*\*10 which mixed 100.0\*\* - \*\* in the Henschel mixer after trituration by the hammer mixer, and was melted in this -\*\*12 \*\*\*\*\* -- it fully mixes in a Henschel mixer After the hammer mixer ground this, it cast to the inside pan and powder foundation was obtained. As a result of observing the status of fine particles in a transmission electron microscope, the spherical hollow bulb is completely the same as that of the status before a manufacture, and deformation did not accept the powder foundation created in the above-mentioned manufacturing process. Moreover, the feeling of use of this powder foundation was the result excellent in the touch to the skin which is not with nonuniformity.

[0012] (Example -2 of a comparison) When the hollow bulb of \*\* was transposed to the hollow PMMA sphere during prescription of the above-mentioned example -2 and the manufacture of powder foundation was tried, a hollow PMMA sphere causes heat deformation in a Henschel mixer, and expected powder foundation was not obtained.

[0013] (Example -3) The base cream was manufactured by prescription shown below using the bulb of 0.3micro of the mean particle diameters which mixed titanium oxide.

[Base cream]

\*\* Monostearin acid polyethylene glycol O [ 40E.O.] 2.0 \*\* monochrome myristic-acid glycerol ] 5.0 \*\* myristic acid 5.0 \*\* behenyl alcohol 0.5 \*\* octanoic-acid cetyl 5.0 \*\* liquid paraffin 10.0 \*\* titanium oxide mixture bulb 15.0 \*\* 1,3-butylene glycol 5.0 \*\* purified water Remainder \*\*10 Perfume Optimum dose Total 100.0\*\*..\*\* and \*\*10 \*\* - \*\* were added and emulsified after \*\*\*\*\* lysis, and it cooled to 30 degrees C. 15 was obtained, as a result of applying to the skin the base cream created in the above-mentioned manufacturing process and measuring SPF (SunProtection Factor). Since the titanium oxide mixture bulb used for this prescription had very good variance in prescription, it was excellent in the uniform application nature to the skin as compared with the titanium oxide combination system usually used, and the application of it without nonuniformity was attained, and it obtained the result of good SPF.

[0014] (Example -3 of a comparison) When \*\* was transposed to titanium oxide during prescription of the above-mentioned example -2 and the creation of a base cream was tried in the same manufacturing process, in order that titanium oxide may cause flocculation in prescription, variance is poor, and expected SPF was not obtained.

[0015] (Example -4) Foundation was manufactured by prescription shown below using the bulb of 10micro of the mean particle diameters which carried out silicone-oil surface treatment.

[Foundation]

\*\* Squalane 15.0 \*\* myristic-acid octyl dodecyl 3.0 \*\* tetrapod isostearic acid dodecyl 1.0 \*\* myristyl alcohol 1.0 \*\* palmitic acid 1.0 \*\* glyceryl monostearate 1.0 \*\* monochrome oleic-acid sorbitan 2.0 \*\* tristearin acid POE glyceryl (20E.O.) 1.0 \*\* monostearin acid POE sorbitan (15E.O.) 2.0 \*\*10 Red ochre 0.2 \*\*11 Yellow iron oxide 0.25 \*\*12 Black iron oxide 0.25 \*\*13 Mica 0.5 \*\*14 Titanium oxide 1.0 \*\*15 Silicone-oil processing bulb 3.0 \*\*16 Bentonite 0.9 \*\*17 Triethanolamine 0.8 \*\*18 Polyoxyethylene methyl glycoside (10E.O.) 2.0 \*\*19 Purified water Remainder \*\*20 Perfume Optimum dose Total The heating lysis of 100.0\*\* - the \*\* is carried out. \*\*10 -\*\*15 h \*\*\*\*\*s. further after variance uniformly with a homogenizer \*\*20 It \*\*\*\*\*ed. Beforehand \*\*16 -\*\*19 \*\* - heating lysis was carried out uniformly, this was added to the above-mentioned mixture, and it cooled to 30 degrees C after emulsification The foundation created in the above-mentioned manufacturing process became the beautiful result without a uniform application, the light touch of a touch, and \*\*\*\*\* at the time of applying.

[0016] \*\*15 in prescription of the above-mentioned example -4 (Example -4 of a comparison) When it transposed to the \*\* silicone-oil processing PMMA sphere and the creation of foundation was tried at the same process, the deformation and weld by heat happened at the siliconization process of PMMA sphere, dispersibility of prescription is poor and the expected touch and a

result were not obtained.

[0017] (Example -5) It transposed to the hollow bulb of 10micro of the mean particle diameters which carried out surface treatment of the \* in the fluorine during prescription of the above-mentioned example -2, and powder foundation was produced at the same process. The bulb of the powder foundation obtained at this process was stable like the example -2, the touch of a product as well as an example -2 was good, and as a result of the irregular reflection nature of a bulb increasing, the product in which the fine sight nature at the time of applying as compared with an example -2 was more excellent was obtained. (Example -5 of a comparison) \*\* was transposed to the piece with a major axis of 10micro of a detailed glass foil during prescription of the above-mentioned example -2, and powder foundation was produced at the same process. The piece of a detailed glass foil in the powder foundation obtained at this process was made detailed as compared with manufacture before which received the in-process segment. Moreover, the fine sight nature at the time of not being uniformly applied to the skin but applying as compared with an example -5 was inferior.

(Example-6-8 and examples 6-8 of a comparison) The charge of pre-shave makeup is obtained by combination shown in the following table 1, respectively, and it is an example. - 6-8, and example of a comparison - It was referred to as 6-8.

[0018]

[Table 1]

表 1

glass sphere beads		実施例			比較例		
		6	7	8	6	7	8
粉	ガラス球 (平均粒径 8 $\mu$ )	4. 0					
	中空ガラス球 (平均粒径 5 $\mu$ ) <i>hollow glass sphere</i>		4. 0				
	ステアリン酸処理ガラス球 <i>stearic acid glass sphere</i> (平均粒径 10 $\mu$ )			4. 0			
	ナイロン・パウダー <i>nylon powder</i> (平均粒径 7 $\mu$ )				4. 0		
	アクリル・パウダー <i>acrylic powder</i> (平均粒径 10 $\mu$ )					4. 0	
	PMMA球 (平均粒径 8 $\mu$ ) <i>sphere</i>						4. 0
液	グリチルリチン酸	0. 1	0. 1	0. 1	0. 1	0. 1	0. 1
	エタノール <i>ethanol</i> (99 v/v%)	75. 0	75. 0	75. 0	75. 0	75. 0	75. 0
	香料 <i>fragrance</i>	0. 5	0. 5	0. 5	0. 5	0. 5	0. 5
	精製水 <i>H<sub>2</sub>O</i>	20. 4	20. 4	20. 4	20. 4	20. 4	20. 4

[0019] In the case of shaving of an example 6-8 mustache, the touch after \*\*\*\*\* was good. Melting of fine particles and solidification which were blended did not accept.

Example 6 of a comparison : Although solidification of the blended fine particles accepted, the touch after \*\*\*\*\* was good in the mustached ease of shaving.

Melting of fine particles and solidification of which example of comparison 7-8: combination was done happened, and the touch after - \*\*\*\*\* was poor in the mustached ease of shaving.

[0020] (Example -9 of a comparison) \*\* was transposed to the bulb of 35micro of mean particle diameters during prescription of the above-mentioned example -1, and face powder was manufactured at the same process. Although the good touch with light slipping was acquired as a result of applying this product to the skin and evaluating it, when the particle size of a bulb increased, the adhesion force to the skin was missing, messy makeup becomes easy to happen, and it became the fault in respect of makeup rice cake. The mean particle diameter of a bulb obtained the conclusion which is good 30micro or less from the result of the example -1 and the example -9 of a comparison.

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Field

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[Field of the Invention] this invention relates to the charge of spherical matter combination makeup.

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**TECHNICAL PROBLEM**

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[Description of the Prior Art] In order to raise the touch nature, solar beam-of-light absorption / irregular reflection nature, and fine sight nature to the skin, various spherical matter may be blended with the charge of makeup. However, the spherical matter made from organic synthetic resin, such as a nylon sphere conventionally blended with the charge of makeup, an acrylic sphere, and PMMA sphere, or a spherical cellulose has thermal resistance and low solvent resistance, and has the fault from which sufficient mechanical strength may not be obtained and the touch and the expected fine sight nature to the satisfactory skin are not obtained by causing deformation at the time of a manufacture of the charge of makeup, or starting a swelling by the solvent. Moreover, although titanium oxide, a silica, etc. may be blended for the purpose which reduces the fault which these spherical matter made from synthetic resin or spherical celluloses transform or swell, or the purpose of solar beam-of-light absorption and a scattered reflection, these matter is inferior in the touch nature to the skin, and also it may have a bad influence on other charge combination components of makeup with the catalytic activity of these matter [ itself ].

[0003] Furthermore, although the piece of a detailed glass foil may be mixed for the purpose of absorption and the scattered reflection of a solar beam of light, the charge of makeup which blended this matter is difficult to apply to the skin uniformly, an expected effect is not not only acquired, but the charge of makeup is easy to destroy from the structure of the shape of a piece of a foil of this matter, and sufficient mechanical strength is not obtained. Moreover, we are anxious about trauma of sublation of the skin to which the charge of makeup was applied etc. on the foil scale structure of this matter.

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## MEANS

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[Means for Solving the Problem] As a result of inquiring zealously paying attention to the combination of the spherical matter which whose this invention persons are mechanically stable as one factor of the touch nature of the charge of makeup, fine sight nature, and solar beam-of-light absorption / irregular reflection nature promotion component, and was excellent in solvent resistance, by blending a bulb It could apply uniformly, the knowledge of the charge excellent in touch nature, large positive-glow line absorption / irregular reflection nature, thermal resistance, solvent resistance, dispersibility, and fine sight nature of makeup being obtained was carried out, and this invention was reached. That is, this invention is a charge of makeup characterized by blending the bulb whose spherical diameters are 0.01-30.0micro.

[0005] The outside of the bulb used by this invention is a true sphere-like thing mostly in solid or hollow, and it requires that the spherical diameter is 0.01-30micro. These bulbs may be mixed with the compound which may use by itself, and absorbs or reflects a solar beam of light irregularly, may use it, and by the surface-coating agent, surface treatment of them may be carried out and they may be used.

[0006] The bulb used by this invention is excellent in the touch to the skin in itself, and is excellent in the absorptivity of ultraviolet rays, and also has the property which is made to reflect a solar beam of light irregularly, and raises a fine sight, and is further excellent also in the mechanical strength. So, according to the charge of makeup which should be blended, these functions can be raised notably. Although it requires that the spherical diameters of a bulb are 0.01-30micro as described above, a more desirable spherical diameter changes a little with the purposes of use. For example, in order to blend glass as an ultraviolet-rays defense agent, as for especially the spherical diameter of a bulb, it is desirable that it is made to be set to 0.01-0.3micro. Moreover, in order for a bulb to raise especially fine sight nature using the property on which a solar beam of light is made to reflect irregularly, it is desirable to be referred to as 0.5micro-20.0micro. Absorption or the irregular reflection effect of a solar beam of light can be further raised by setting to these, and considering as the compound which absorbs or reflects a solar beam of light irregularly on a bulb, for example, mixing particle titanium oxide, a particle zinc oxide, an iron oxide, or a cerium oxide.

[0007] It is also desirable to blend a bulb with the charge for \*\*\*\* of makeup etc. using the mechanical strength of a bulb, and, as for the spherical diameter of the bulb in this case, it is desirable to be referred to as 5.0micro-30.0micro. Especially the loadings in the case of blending the bulb of this invention with the charge of makeup do not receive a limit, and, generally are used in 1% - 70% of the domain, and an optimum amount is suitably determined by the properties searched for, such as the touch nature to the skin, fine sight nature, and ultraviolet-rays defense nature. It is also desirable to carry out surface treatment of the bulb and to use it in order to defend elution into the emergency charge of makeup of the component which constitutes glass and to reinforce the compatibility with the charge component of makeup. Although metallic soaps, such as a silicone compound which was excellent in thermal resistance and solvent resistance as a surface treatment agent in this case, a fatty acid, and fatty-acid aluminum, an organic fluorine compound, etc. are desirable, if it is the matter which holds the property of a bulb and fits the surface treatment of a bulb, any processing agents can be used.

[0008] Although an example and the example of a comparison explain this invention still in detail below, this invention is not limited to the following examples. (In addition, a "bulb" means a solid bulb below.)

[0009] (Example -1) Face powder was manufactured by prescription shown below using the bulb of 30micro of mean particle diameters.

[Face powder]

\*\* A zinc stearate 1.0 \*\* calcium carbonate 5.0 \*\* A mica 10.0 \*\* Titanium oxide 3.0 \*\* A bulb 60.0 \*\* Red ochre 0.1 \*\* yellow iron oxide 0.1 \*\* black iron oxide 0.01 \*\* talc Optimum-dose \*\*10 Vaseline 1.0 \*\*11 Liquid paraffin 1.0 Total \*\*10 which mixed 100.0\*\* - \*\* in the Henschel mixer after trituration by the hammer mixer, and was melted in this -\*\*11 It fully mixes in \*\*\*\*\* and a Henschel mixer. After the hammer mixer ground this, the container was filled up and face powder was obtained. As a result of observing the face powder created in the above-mentioned manufacturing process in a scanning electron microscope, the bulb is completely the same as that of the status before a manufacture, and deformation did not accept. Moreover, the feeling of use of this face powder became the result which is not with the nonuniformity which was excellent in the touch to the skin with the light feeling of a touch.

[0010] (Example -1 of a comparison) When \*\* bulb was transposed to nylon powder during prescription of the above-mentioned example -1 and the manufacture of face powder was tried in the same manufacturing process, nylon powder causes deformation by the hammer mixer, and expected face powder was not obtained.

[0011] (Example -2) Powder foundation was manufactured by prescription shown below using the hollow bulb of 10micro of mean particle diameters.

[Powder foundation]

\* A hollow bulb 20.0 \*\* A mica 10.0 \*\* A sericite 40.0 \*\* Titanium oxide 5.0 \*\* A zinc stearate 5.0 \*\* red ochre 0.5 \*\* yellow iron oxide 1.0 \*\* black iron oxide 0.2 \*\* talc optimum-dose \*\*10 Liquid paraffin 6.5 \*\*11 Vaseline 3.0 \*\*12 Polyoxyethylene stearyl 0.5 Total \*\*10 which mixed 100.0\*\* - \*\* in the Henschel mixer after trituration by the hammer mixer, and was melted in this - \*\*12 \*\*\* - it fully mixes in a Henschel mixer After the hammer mixer ground this, it cast to the inside pan and powder foundation was obtained. As a result of observing the status of fine particles in a transmission electron microscope, the spherical hollow bulb is completely the same as that of the status before a manufacture, and deformation did not accept the powder foundation created in the above-mentioned manufacturing process. Moreover, the feeling of use of this powder foundation was the result excellent in the touch to the skin which is not with nonuniformity.

[0012] (Example -2 of a comparison) When the hollow bulb of \*\* was transposed to the hollow PMMA sphere during prescription of the above-mentioned example -2 and the manufacture of powder foundation was tried, a hollow PMMA sphere causes heat deformation in a Henschel mixer, and expected powder foundation was not obtained.

[0013] (Example -3) The base cream was manufactured by prescription shown below using the bulb of 0.3micro of the mean particle diameters which mixed titanium oxide.

[Base cream]

\*\* Monostearin acid polyethylene glycol [ 40E.O.] 2.0 \*\* monochrome myristic-acid glycerol ] 5.0 \*\* myristic acid 5.0 \*\* behenyl alcohol 0.5 \*\* octanoic-acid cetyl 5.0 \*\* liquid paraffin 10.0 \*\* titanium oxide mixture bulb 15.0 \*\* 1,3-butylene glycol 5.0 \*\* purified water Remainder \*\*10 Perfume Optimum dose Total 100.0\*\* and \*\*10 \*\* - \*\* were added and emulsified after \*\*\*\* lysis, and it cooled to 30 degrees C. 15 was obtained, as a result of applying to the skin the base cream created in the above-mentioned manufacturing process and measuring SPF (SunProtection Factor). Since the titanium oxide mixture bulb used for this prescription had very good variance in prescription, it was excellent in the uniform application nature to the skin as compared with the titanium oxide combination system usually used, and the application of it without nonuniformity was attained, and it obtained the result of good SPF.

[0014] (Example -3 of a comparison) When \*\* was transposed to titanium oxide during prescription of the above-mentioned example -2 and the creation of a base cream was tried in the same manufacturing process, in order that titanium oxide may cause flocculation in prescription, variance is poor, and expected SPF was not obtained.

[0015] (Example -4) Foundation was manufactured by prescription shown below using the bulb of 10micro of the mean particle diameters which carried out silicone-oil surface treatment.

[Foundation]

\*\* Squalane 15.0 \*\* myristic-acid octyl dodecyl 3.0 \*\* tetrapod isostearic acid dodecyl 1.0 \*\* myristyl alcohol 1.0 \*\* palmitic acid 1.0 \*\* glyceryl monostearate 1.0 \*\* monochrome oleic-acid sorbitan 2.0 \*\* tristearin acid POE glyceryl (20E.O.) 1.0 \*\* monostearin acid POE sorbitan (15E.O.) 2.0 \*\*10 Red ochre 0.2 \*\*11 Yellow iron oxide 0.25 \*\*12 Black iron oxide 0.25 \*\*13 Mica 0.5 \*\*14 Titanium oxide 1.0 \*\*15 Silicone-oil processing bulb 3.0 \*\*16 Bentonite 0.9 \*\*17 Triethanolamine 0.8 \*\*18 Polyoxyethylene methyl glycoside (10E.O.) 2.0 \*\*19 Purified water Remainder \*\*20 Perfume Optimum dose Total The heating lysis of 100.0\*\* - the \*\* is carried out. \*\*10 -\*\*15 It \*\*\*\*\*s. further after variance uniformly with a homogenizer \*\*20 It \*\*\*\*\*ed. Beforehand \*\*16 -\*\*19 \*\* - heating lysis was carried out uniformly, this was added to the above-mentioned mixture, and it cooled to 30 degrees C after emulsification The foundation created in the above-mentioned manufacturing process became the beautiful result without a uniform application, the light touch of a touch, and \*\*\*\*\* at the time of applying.

[0016] \*\*15 in prescription of the above-mentioned example -4 (Example -4 of a comparison) When it transposed to the \*\* silicone-oil processing PMMA sphere and the creation of foundation was tried at the same process, the deformation and weld by heat happened at the siliconization process of PMMA sphere, dispersibility of prescription is poor and the expected touch and a result were not obtained.

[0017] (Example -5) It transposed to the hollow bulb of 10micro of the mean particle diameters which carried out surface treatment of the \*\* in the fluorine during prescription of the above-mentioned example -2, and powder foundation was produced at the same process. The bulb of the powder foundation obtained at this process was stable like the example -2, the touch of a product as well as an example -2 was good, and as a result of the irregular reflection nature of a bulb increasing, the product in which the fine sight nature at the time of applying as compared with an example -2 was more excellent was obtained.

(Example -5 of a comparison) \*\* was transposed to the piece with a major axis of 10micro of a detailed glass foil during prescription of the above-mentioned example -2, and powder foundation was produced at the same process. The piece of a detailed glass foil in the powder foundation obtained at this process was made detailed as compared with manufacture before which received the in-process segment. Moreover, the fine sight nature at the time of not being uniformly applied to the skin but applying as compared with an example -5 was inferior.

(Example-6-8 and examples 6-8 of a comparison) The charge of pre-shave makeup is obtained by combination shown in the following table 1, respectively, and it is an example. - 6-8, and example of a comparison - It was referred to as 6-8.

[0018]

[Table 1]

表1

		実施例			比較例		
		6	7	8	6	7	8
粉 体	ガラス球 (平均粒径 8 $\mu$ )	4. 0					
	中空ガラス球 (平均粒径 5 $\mu$ )		4. 0				
	ステアリン酸処理ガラス球 (平均粒径 10 $\mu$ )			4. 0			
	ナイロン・パウダー (平均粒径 7 $\mu$ )				4. 0		
	アクリル・パウダー (平均粒径 10 $\mu$ )					4. 0	
	PMMA球 (平均粒径 8 $\mu$ )						4. 0
	グリチルリチン酸	0. 1	0. 1	0. 1	0. 1	0. 1	0. 1
液 体	エタノール (99 $\nabla$ / $\nabla$ %)	75. 0	75. 0	75. 0	75. 0	75. 0	75. 0
	香料	0. 5	0. 5	0. 5	0. 5	0. 5	0. 5
	精製水	20. 4	20. 4	20. 4	20. 4	20. 4	20. 4

[0019] In the case of shaving of an example 6-8: mustache, the touch after \*\*\*\*\* was good. Melting of fine particles and solidification which were blended did not accept.

Example 6 of a comparison : Although solidification of the blended fine particles accepted, the touch after \*\*\*\*\* was good in the mustached ease of shaving.

Melting of fine particles and solidification of which example of comparison 7-8: combination was done happened, and the touch after - \*\*\*\*\* was poor in the mustached ease of shaving.

[0020] (Example -9 of a comparison) \*\* was transposed to the bulb of 35micro of mean particle diameters during prescription of the above-mentioned example -1, and face powder was manufactured at the same process. Although the good touch with light slipping was acquired as a result of applying this product to the skin and evaluating it, when the particle size of a bulb increased, the adhesion force to the skin was missing, messy makeup becomes easy to happen, and it became the fault in respect of makeup rice cake. The mean particle diameter of a bulb obtained the conclusion which is good 30micro or less from the result of the example -1 and the example -9 of a comparison.

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Correction and a correction

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[Procedure revision]  
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[Procedure correction 1]  
[Document to be Amended] Specification  
[Item(s) to be Amended] Whole sentence  
[Method of Amendment] Change  
[Proposed Amendment]  
[Document Name] Specification  
[Title of the Invention] The charge of makeup  
[Claim(s)]

[Claim 1] The charge of makeup characterized by blending the bulb of the hollow whose spherical diameters are 0.01-30micro.  
[Claim 2] The charge according to claim 1 of makeup with which it comes to use together the thing more than a kind chosen out of particle titanium oxide, a particle zinc oxide, an iron oxide, and a cerium oxide.  
[Claim 3] The charge according to claim 1 or 2 of makeup characterized by carrying out surface treatment above a kind as which a bulb in the air is chosen out of a silicone compound, a fatty acid, a metallic soap, and an organic fluorine compound.

[Detailed Description of the Invention]

[0001]

[Field of the Invention] this invention relates to the charge of spherical matter combination makeup.

[0002]

[Description of the Prior Art] In order to raise the touch nature, solar beam-of-light absorption / irregular reflection nature, and fine sight nature to the skin, various spherical matter may be blended with the charge of makeup. However, the spherical matter made from organic synthetic resin, such as a nylon sphere conventionally blended with the charge of makeup, an acrylic sphere, and PMMA sphere, or a spherical cellulose has thermal resistance and low solvent resistance, and has the fault from which sufficient mechanical strength may not be obtained and the touch and the expected fine sight nature to the satisfactory skin are not obtained by causing deformation at the time of a manufacture of the charge of makeup, or starting a swelling by the solvent. Moreover, although titanium oxide, a silica, etc. may be blended for the purpose which reduces the fault which these spherical matter made from synthetic resin or spherical celluloses transform or swell, or the purpose of solar beam-of-light absorption and a scattered reflection, these matter is inferior in the touch nature to the skin, and also it may have a bad influence on other charge combination components of makeup with the catalytic activity of these matter [ itself ].

[0003] Furthermore, although the piece of a detailed glass foil may be mixed for the purpose of absorption and the scattered



reflection of a solar beam of light, the charge of makeup which blended this matter is difficult to apply to the skin uniformly, an expected effect is not only acquired, but the charge of makeup is easy to destroy from the structure of the shape of a piece of a foil of this matter, and sufficient mechanical strength is not obtained. Moreover, we are anxious about trauma of sublation of the skin to which the charge of makeup was applied etc. on the foil scale structure of this matter.

[0004]

[Means for Solving the Problem] This invention persons as one factor of the touch nature of the charge of makeup, fine sight nature, and solar beam-of-light absorption / irregular reflection nature promotion component As a result of inquiring zealously paying attention to the combination of the spherical matter which is mechanically stable and was excellent in solvent resistance, by blending a specific bulb It could apply uniformly, the knowledge of the charge excellent in touch nature, solar beam-of-light absorption / irregular reflection nature, thermal resistance, solvent resistance, dispersibility, and fine sight nature of makeup being obtained was carried out, and this invention was reached. That is, this invention is a charge of makeup characterized by blending the bulb of the hollow whose spherical diameters are 0.01-30.0micro.

[0005] The outside of the bulb used by this invention is a true sphere-like thing mostly in hollow, and it requires that the spherical diameter is 0.01-30micro. Although it may mix with the compound which may use the bulb of these hollow by itself, and absorbs or reflects a solar beam of light irregularly and you may use it, it is desirable to carry out surface treatment and to use it especially by the surface-coating agent.

[0006] The bulb of the hollow used by this invention is excellent in the touch to the skin in itself, and is excellent in the absorptivity of ultraviolet rays, and also has the property which is made to reflect a solar beam of light irregularly, and raises a fine sight, and is further excellent also in the mechanical strength. So, according to the charge of makeup which should be blended, these functions can be raised notably. Although it requires that the spherical diameters of a bulb in the air are 0.01-30micro as described above, a more desirable spherical diameter changes a little with the purposes of use. For example, in order to blend glass as an ultraviolet-rays defense agent, as for especially the spherical diameter of a bulb, it is desirable that it is made to be set to 0.01-0.3micro. Moreover, in order for a bulb to raise especially fine sight nature using the property on which a solar beam of light is made to reflect irregularly, it is desirable to be referred to as 0.5micro-20.0micro. Absorption or the irregular reflection effect of a solar beam of light can be further raised by setting to these, and considering as the compound which absorbs or reflects a solar beam of light irregularly on a bulb, for example, mixing particle titanium oxide, a particle zinc oxide, an iron oxide, or a cerium oxide.

[0007] It is also desirable to blend a bulb in the air with the charge for \*\*\*\* of makeup etc., and, as for the spherical diameter of the bulb in this case, it is desirable to be referred to as 5.0micro-30.0micro. Especially the loadings in the case of blending the bulb of the hollow of this invention with the charge of makeup do not receive a limit, and, generally are used in 1% - 70% of the domain, and an optimum amount is suitably determined by the properties searched for, such as the touch nature to the skin, fine sight nature, and ultraviolet-rays defense nature. It is also desirable to carry out surface treatment of the bulb and to use it in order to defend elution into the emergency charge of makeup of the component which constitutes glass and to reinforce the compatibility with the charge component of makeup. Although metallic soaps, such as a silicone compound which was excellent in thermal resistance and solvent resistance as a surface treatment agent in this case, a fatty acid, and fatty-acid aluminum, an organic fluorine compound, etc. are desirable, if it is the matter which holds the property of a bulb and fits the surface treatment of a bulb, any processing agents can be used.

[0008] Although an example and the example of a comparison explain this invention still in detail below, this invention is not limited to the following examples.

[0009] (Example -1) Powder foundation was manufactured by prescription shown below using the hollow bulb of 10micro of mean particle diameters.

[Powder foundation]

- (1) Hollow bulb 20.0
- (2) Mica 10.0
- (3) Sericite 40.0
- (4) Titanium oxide 5.0
- (5) Zinc stearate 5.0
- (6) Red ocher 0.5
- (7) Yellow iron oxide 1.0
- (8) Black iron oxide 0.2
- (9) Talc Optimum dose
- (10) Liquid paraffin 6.5
- (11) Vaseline 3.0
- (12) Polyoxyethylene stearyl 0.5
- Total 100.0

(1) - (9) is mixed in a Henschel mixer after trituration by the hammer mixer, and (10) - (12) melted in this is added, and it fully mixes in a Henschel mixer. After the hammer mixer ground this, it cast to the inside pan and powder foundation was obtained. As a result of observing the status of fine particles in a transmission electron microscope, the spherical hollow bulb is completely the same as that of the status before a manufacture, and deformation did not accept the powder foundation created in the above-mentioned manufacturing process. Moreover, the feeling of use of this powder foundation was the result excellent in the touch to the skin which is not with nonuniformity.

[0010] (Example -1 of a comparison) When the hollow bulb of (1) was transposed to the hollow PMMA sphere during prescription of the above-mentioned example -1 and the manufacture of powder foundation was tried, a hollow PMMA sphere causes heat deformation in a Henschel mixer, and expected powder foundation was not obtained.

[0011] (Example -2) It transposed to the hollow bulb of 10micro of the mean particle diameters which carried out surface treatment of (1) in the fluorine during prescription of the above-mentioned example -1, and powder foundation was produced at the same process. The bulb of the powder foundation obtained at this process was stable like the example -1, the touch of a product as well as an example -1 was good, and as a result of the irregular reflection nature of a bulb increasing, the product in which the fine sight nature at the time of applying as compared with an example -1 was more excellent was obtained.

[0012] (Example -2 of a comparison) (1) was transposed to the piece with a major axis of 10micro of a detailed glass foil during prescription of the above-mentioned example -1, and powder foundation was produced at the same process. The piece of a detailed glass foil in the powder foundation obtained at this process was made detailed as compared with manufacture before which received the in-process segment. Moreover, the fine sight nature at the time of not being uniformly applied to the skin but applying as compared with an example -2 was inferior.

[0013] (The example -3 and examples 3-5 of a comparison) The charge of pre-shave makeup is obtained by combination shown in the following table 1, respectively, and it is an example. - 3 and example of a comparison - It was referred to as 3-5.

[0014]

[Table 1]

表 1

		実施例	比較例		
		3	3	4	5
粉 体	中空ガラス球 (平均粒径 5 $\mu$ ) <i>hollow</i>	4. 0			
	ナイロン・パウダー <i>nylon powder</i> (平均粒径 7 $\mu$ )		4. 0		
	アクリル・パウダー <i>acrylic powder</i> (平均粒径 10 $\mu$ )			4. 0	
	PMMA球 (平均粒径 8 $\mu$ )				4. 0
	グリチルリチン酸	0. 1	0. 1	0. 1	0. 1
液 体	エタノール (99 v / v %)	75. 0	75. 0	75. 0	75. 0
	香料	0. 5	0. 5	0. 5	0. 5
	精製水	20. 4	20. 4	20. 4	20. 4

[0015] Example 3 : In the mustached case of shaving, the touch after \*\*\*\*\* was good.

Melting of fine particles and solidification which were blended did not accept.

Example 3 of a comparison : Although solidification of the blended fine particles accepted, the touch after \*\*\*\*\* was good in the mustached case of shaving.

The example 4 of a comparison, melting of fine particles of which 5:combination was done, and solidification happened, and the touch after - \*\*\*\*\* was poor in the mustached case of shaving.